VITA

WU, C Thomas

Naval Postgraduate School
Department of Computer Science
Monterey, CA 93943
408 (656) 3391
ctwu@cs.nps.navy.mil
http://www.cs.nps.navy.mil/~ctwu

Education:

University of California, San Diego, La Jolla, CA, PhD in Computer Science (August, 1983) Ph.D Thesis: "Associative Searching in Multiple Random Access Storage Units"; M.S. in Computer Science (June, 1981).

San Diego State University, San Diego, CA, M.S. in Computer Science (December, 1978); B.A. in Mathematics (May, 1975).

Field of Interest:

DBMS, User Interface Design, Object-Oriented Database, and Database Design.

Experience:

Naval Postgraduate School, Monterey, CA, June, 1985 - present; January, 1985 - March, 1985; Associate Professor. Associate Chair for Instruction, July, 1989 - June, 1991. Chair for Lab Planning Committee, July, 1991 - June, 1993. Associate Chair for Research, July, 1992 - July, 1993.

Northwestern University, Evanston, IL, September, 1983 - June, 1985.Assistant Professor - taught all levels of Computer Science courses. Chapman College (Regional Education Center), San Diego, CA, September, 1980 - August, 1983. Instructor - taught all levels of Computer Science courses.

University of California, San Diego, La Jolla, CA, September, 1979 - August, 1983. Teaching Assistant - graded the assignments, tutored the students and supervised the discussion session of the Computer Science courses.

San Diego State University, San Diego, CA, September, 1979 -December, 1981; September, 1977 - December, 1978; September, 1975 - May, 1976. Instructor/Teaching Assistant - taught the Introductory Computer Science courses and lower division Mathematics courses.

Publications:

Only the conference and journal publications are listed here; technical reports are excluded.

Introduction to Object-Oriented Programming with Java, under contract with McGraw-Hill Publishing, to be published in 1998.

Introduction to Programming: Object-Oriented Approach with C++, with T. A. Norman, McGraw-Hill Publishing, 1997. ISBN 0-256-19390-8.

"DFQL: Dataflow Query Language for Relational Databases," with G. J. Clark, *Information & Management*, 27 (1994), 1 - 15.

"A Unified Query Language for Integrating CAE Database," in the Proceedings of International Conference on Data and Knowledge Systems for Manufacturing and Engineering, The Chinese University of Hong Kong, May 2 - 4, 1994, 624 – 629.

"A Three–Stage Approach for OOP Education," in the Proceedings of the 12th Annual National Conference on Ada Technology, Williamsburg, VA, March 21 – 24, 1994, 252 – 257.

"Teaching OOP in Three Stages," *Journal of Object–Oriented Programming*, Vol 6, No 5, Sept 1993, 62 – 65.

"Three–Stage, Incremental Approach in Teaching OOP," *Journal of Object–Oriented Programming*, Vol 6, No 4, July/August 1993, 86 – 89.

"Teaching OOP to Beginners," *Journal of Object–Oriented Programming*, Vol 6, No 1, March/April 1993, 47 – 50.

"An Integrated Visual Environment for Relational Databases," in the Proceedings of the 5th International Conference on Human-Computer Interaction, Orlando, FL, August 8 - 13, 1993, 203.

"Visual Query Languages for Relational Databases," in the Proceedings of DS-5 International Conference on Semantics of Interoperable Database Systems, Lorne, Australia, Nov 1992.

"Protocol vs. multiple inheritance," *Journal of Object-Oriented Programming*, Vol 5, No 4, July/August 1992, 72-75.

"Improving reusability with Actor 4.0's protocol mechanism," *Journal of Object-Oriented Programming*, Vol 5, No. 1, March/April 1992, 49 - 51.

"Faster Program Development with Actor WDL and Action Methods," *Journal of Object-Oriented Programming*, Vol 4, No. 9, Feb 1992, 54 - 60.

"Steps Toward Increasing Reliability," *Journal of Object-Oriented Programming*, Vol 4, No. 5, Sept 1991, 64-66.

"OOP + Visual Dataflow Diagram = Prograph," *Journal of Object-Oriented Programming*,

(Software Review) Vol 4, No. 3, June 1991, 71-75.

"Polymorphism for Achieving Extensibility," *Journal of Object-Oriented Programming*, Vol 4, No. 2, May 1991, 58-63.

"Making Windows Follow Their Leader," PC Techniques, Vol 2, No. 1, April/May 1991, 69-70.

"Benefits of Abstract Superclass," *Journal of Object-Oriented Programming*, Vol 3, No. 6, Feb 1991, 57-62.

"A Better Browser for Object-Oriented Programming," *Journal of Object-Oriented Programming*, Vol 3, No. 4, Nov/Dec 1990, 22-28.

"Object-Oriented Programming Environment Actor" (in Japanese) Nikkei Byte Magazine, March, 1990.

"Development of a Visual Database Interface An Object-Oriented Approach" a chapter in Applications of Object-Oriented Programming, Chapter 4, Lewis Pinson and Richard Wiener (Editors), Addison-Wesley, 1991, 101-138.

"Benefits of Object-Oriented Programming in Implementing Visual Database Interface," *Journal of Object-Oriented Programming*, Vol 2, No 6, Mar/Apr 1990.

Actor Guidebook, (in Japanese) AMS Japan, 1989, 89 pages.

"Implementing Visual Database Interface by Using an Object-Oriented Language," (with D. K. Hsiao) in Proceedings of IFIP TC-2 Working Conference on Visual Database Systems, Tokyo, Japan, April 3-7, 1989, 105-126.

"Image Database Management in a Multimedia System," (with K. Meyer-Wegener and V. Y. Lum) in Proceedings of IFIP TC-2 Working Conference on Visual Database Systems, Tokyo, Japan, April 3-7, 1989, 497-524.

"Integrating Advanced Techniques into Multimedia DBMS," (with Vincent Y. Lum and David K. Hsiao) in Proceedings of IFIP TC2-TC8 Working Conference: Role of A. I. in Database and Information Systems, Canton, China, July, 1988.

"Data-Driven CIM Part II," (with Dana E. Madison and Thomas G. Wilbur Jr.) in *Computers in Mechanical Engineering*, Vol 6, No 6, May/June, 1988, 38- 46.

"Data-Driven CIM Part I," (with Dana E. Madison and Thomas G. Wilbur Jr.) *Computers in Mechanical Engineering*, Vol 6, No 5, March/April, 1988, 38-45.

"Towards a Fully-Computerized Database Maintenance for Non-Traditional Applications," Proceedings of the 1987 ACM-IEEE Computer Society Fall Joint Computer Conference, Dallas, October, 1987, 469-474.

"GLAD: Graphics LAnguage for Database," Proceedings of the 11th International Computer Software and Applications Conference, Tokyo, Japan, October, 1987, 164-170.

"Visual Information Management System for an Effective Performance of Office Tasks," (Abstract with S. Crowder) Proceedings of the 2nd International Conference on Human-Computer Interaction, Honolulu, August, 1987.

"An Integration in Computer Integrated Manufacturing," (with D. E. Madison) Proceedings of the International Computer Engineering Design Conference, Boston, August, 1987, 394-398.

"Associative Searching in Multiple Storage Unit Model," (with W. A. Burkhard), *ACM Transactions on Database Systems*, Vol 12, No 1, March, 1987, 38-64.

"An Expert System Interface and Data Requirements for the Integrated Design and Manu-facturing Process," (with D. E. Madison) in the Proceedings of the 3rd International Con-ference on Data Engineering, Los Angeles, February, 1987, 610-618.

"A Research Report on the Laboratory for Database Systems Research: Past, Present, and Future," (with J. D. Anand, et. al) in the Proceedings of the 6th Advanced Database Sym-posium, Tokyo, Japan, August, 1986, 33-44.

"A New Graphical User Interface for Accessing a Database," in Proceedings of Computer Graphics Tokyo '86 Conference, Tokyo, Japan, April, 1986, 203-217.

"The Simplicity Requirement of a CAD/CAM Information Support System" in Proceed-ings of Workshop for Information Support System for Integrated Design and Manufactur-ing Processes, Monterey, Ca., April, 1986.

"Data Organization Method for the Parallel Execution of Relational Operations," Proceed-ings of International Conference on Foundations of Data Organization, Kyoto, Japan, May, 1985, 399 - 405. Also in Foundations of Data Organization, Plenum Publishing Corpora-tion, 529-538.

"Concurrency in Linear and Interpolation Hashing," (with W. A. Burkhard), Proceedings of the 19th Annual Conference on Information Sciences and Systems, The John Hopkins University, March, 1985.

"Maintaining B-tree and B$^+$-tree in Multiple Storage Units," Proceedings of 1984 Trends and Applications Conference: Making Database Work, Gaithersburg, Maryland, May 1984, 301 - 307.

"Interpolation Hashing with Descriptors," Proceedings of the 18th Annual Conference on Information Sciences and Systems, Princeton University, March, 1984.

"Multiple Storage Units for Dynamic File Organization," (with W. A. Burkhard), Proceed-ings of the 17th Annual Conference on Information Sciences and Systems, The John Hop-kins University, March, 1983, 478 - 483.

Awards:

Fellow, the 1984-85 Lilly Endowment for the Postdoctoral Teaching Awards.

Illinois Chapter of Tau Beta Pi Honor Engineering Society's Outstanding Teaching Award, April, 1984.

Professional Society and Activities:

Columnist, *Journal of Object-Oriented Programming* 1991 - 1993.
Publication Coordinator, VLDB Journal
Member of IEEE Computer Society Technical Committee on Data Engineering.
Program Committee, IEEE Office Automation Symposium.
Program Committee, COIS88 - Office Information Systems.
Program Chairman, Workshop on Information Support System for Design and Manufacturing Processes.
Registration Committee, COMPSAC 84.
Session Chair, IEEE Office Automation Symposium '87
Session Chair, Computer Graphics Tokyo '86.
Session Chair, COMPSAC 84.
Referee and reviewer for
      NSF, Design Theory and Methodology Program
      ACM Transaction on Database Systems.
      ACM SIGMOD International Conference, 1987.
      COIS88 - Office Information Systems.
      Fall Joint Conference, 1987.
      Data and Knowledge Engineering.
      IEEE Third International Conference on Data Engineering.
      IEEE Transaction on Software Engineering.
      IEEE Computer Magazine.
      IEEE Office Automation Symposium
      Information Sciences.
      IFIP Conference on Methods and Tools for Office Systems.
      The 11th - 13th International Conference on Very Large Data Bases, 1986.
      The 4th International Conference on Entity-Relationship Approach, 1985.
      MacMillan Publishing Co.
      Richard Irwin Publishing Co.
      Reston Publishing Co.